USSN: 10/540,607

Attorney Docket No: 2384.00060

CLAIMS:

1. (Currently Amended) A charge-transfer chemical sensor comprising: a sol-gel material <u>affixed</u> <u>affixable</u> to a predetermined exterior surface, a backing that enables affixation to <u>said</u> [[the]] surface, and charge-transfer indicating means within said solgel for detecting and signaling a presence of at least one chemical selected from the group consisting essentially of chemical warfare agents, agricultural pesticides, and insecticides.

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- 2. (Previously Presented) The sensor according to claim 1, wherein said indicating means includes colorimetric signal means for signaling the presence of at least one chemical.
- 3. (Previously Presented) The sensor according to claim 2, wherein said signal means is selected from the group consisting essentially of an indicator with Cu (II), an indicator with a Lewis acid, Cu²⁺/PEDTA, CuZnSOD, Ni²⁺/dimethylglyoime, thymol blue/Fichlor, thymol blue/sarinase, thymol blue/somanase, and thymol blue/parathion hydrolase.
- 4. (Previously Presented) The sensor according to claim 1, wherein said sol-gel is an optically transparent xerogel.
- 5. (Canceled)
- 6. (Currently Amended) An indicator for detecting and indicating a presence of at least one chemical, said indicator comprising: a sol-gel material <u>affixed</u> <u>affixable</u> to a predetermined exterior surface, a backing that enables affixation to [[the]] <u>said</u> surface, and charge-transfer indicating means within said sol-gel for detecting and

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signaling a presence of at least one chemical selected from the group consisting

essentially of chemical warfare agents, agricultural pesticides, and insecticides.

7. (Previously Presented) The indicator according to claim 6, wherein said

indicating means includes colorimetric signal means for signaling the presence of at

least one chemical.

8. (Previously Presented) The sensor according to claim 7, wherein said signal

means is selected from the group consisting essentially of an indicator with Cu (II),

an indicator with a Lewis acid, Cu²⁺/PEDTA, CuZnSOD, Ni²⁺/dimethylglyoime, thymol

blue/Fichlor, thymol blue/sarinase, thymol blue/somanase, and thymol blue/parathion

hydrolase.

9. (Previously Presented) The sensor according to claim 6, wherein said sol-gel

is an optically transparent xerogel.

10. (Canceled)

11. (Previously Presented) A method of detecting a presence of at least one

chemical by: applying the indicator of claim 6 to a predetermined exterior surface of

an object; and indicating on the indicator the presence of at least one chemical.

12-17. (Canceled)